



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

APR 22 2005

Mr. Deepak Joshi  
National Transportation Safety Board  
490 L'Enfant Plaza, Room 5235  
Washington, DC 20594

Dear Mr. Joshi:

The Federal Aviation Administration (FAA) appreciates the opportunity to respond to the recent proposal by the National Transportation Safety Board (NTSB) to Title 49 of the U.S. Code of Federal Regulations (49 CFR), Part 830, "Notification and Reporting of Aircraft Accidents or Incidents and Overdue Aircraft, and Preservation of Aircraft Wreckage, Mail, Cargo and Records" (69 FR 77150; December 27, 2004). The FAA provides the following comments specifically to the proposed amendment to 49 CFR Part 830.5 Immediate Notification, (a)(10) Any Airborne Collision and Avoidance System (ACAS) Resolution Advisories (RA) issued when an aircraft is being operated on an Instrument Flight Rules flight plan.

The thresholds used by the ACAS II equipment to generate a RA were developed independently of air traffic control (ATC) separation standards. As a result, RAs are frequently triggered during normal (safe) operations where a loss of ATC separation has not occurred, but where ACAS algorithms project that an intruder poses a potential collision risk unless the aircraft is maneuvered to change the projected encounter. ACAS has no knowledge of intruder intent, including any ATC clearance. As a result, planned changes in vertical rates and/or to heading may trigger an RA. Although an ACAS RA is not considered an emergency, FAA Advisory Circular 120-55b advises aircrews to report to ATC any ACAS RAs "that direct a deviation from assigned altitude as soon as practicable after responding to the RA." This reporting is done via the air-ground communications channel.

ATC frequently uses visual separation procedures in U.S. civil airspace. In these cases, the pilots assume the separation responsibility from ATC and maintain visual separation with other aircraft. Consequently, under these procedures, aircraft are deliberately and safely operated in closer proximity to each other compared to the required separation standard, radar or procedural, used by ATC. As a result, a large number of ACAS RAs may be issued when no collision risk exists and no loss of standard ATC separation has occurred, even though the observed separation between the two aircraft may be less than ATC nonvisual separation standards.

Furthermore, ACAS was designed as a collision avoidance system and, by design, must intrude into normal operations to carry out its intended function, independent and distinct from ATC means of providing separation. Classifying every ACAS RA issued as an "incident" would result in a significant number of RAs being formally reported where there is no hazard to the ATC System. Due to the large number of RAs that do not adversely impact safety, this reporting would pose an undue burden on aircraft operators, pilots, the FAA, and the NTSB. Therefore, the FAA believes it is inappropriate and potentially misleading to use ACAS RA data as it is being proposed in this notice, which assumes that each RA indicates a potential hazard in the ATC system.

Sincerely,

A handwritten signature in black ink that reads "Nick Sabatini". The signature is written in a cursive, flowing style.

Nicholas A. Sabatini  
Associate Administrator for  
Aviation Safety